

CHUMAKOV, M.P.

Classification and nomenclature of viruses of the antigen subgroup of
tick-borne encephalitis. Vop. virus. 10 no.3:376-380 My-Je '65.
(MIRA 18:7)

1. Institut poliomyelita i virusnykh entsefalitov AMN SSSR, Moskva.

SHESTOPALOVA, N.M.; REYNGOL'D, V.N.; CAVRILOVSKAYA, I.N.; BELYAYEVA, A.P.;
CHUMAKOV, M.P.

Electron microscopic study of the morphology and localization
of Omsk hemorrhagic fever virus in cells of the infected tissue
culture. Vop. virus. 10 no.4:425-430 J1-Ag '65.

(MIRA 18:8)

1. Institut poliomyelita i virusnykh entsefalitov AMN SSSR,
Moskva.

NABOKOV, V.A., LARYUKHIN, M.A., TARABUKHIN, I.A., CHUMAK, N.F., CHIGIRIK, Ye.D.

Three years of experience in the control of sectors of tick-borne encephalitis in Kemerovo Province (1955-1957). Med. paraz. i paraz. bol. 27 no.2:199-207 Mr. Ap '58 (MIRA 11:5)

1. Iz sektora profilaktiki infektsiy Instituta malyarii, meditsinskoy parazitologii i gel'mintologii Ministerstva zdravookhreneniya SSSR (dir. instituta - prof. P.G. Sergiyev, zav. sektorom - prof. V.A. Nabokov) i iz Kemerovskoy oblastnoy sanitarno-epidemiologicheskoy stantsii (glavnyy vrach G.N. Naydich).

(ENCEPHALITIS, epidemiology

tick-borne encephalitis, control of vectors (Rus))

(TICKS,

control in prev. of tick-borne encephalitis (Rus))

CHUMAK, N. F., NAIDICH, G. N., CHIGIRIK, E. D., FLESHIVTSEVA, E. A.

"Prophylactic methods and local eradication of tick-borne encephalitis in some areas of the Kemerovo oblast." Page 82

Desyatoye soveshchaniye po parazitologicheskim problemam i priodnoochagovym boleznyam. 22-29 Okiyabrya 1959 g. (Tenth Conference on Parasitological Problems and Diseases with Natural Foci 22-29 October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences USSR and Academy of Sciences USSR, No. 1 254pp.

CHUMAK, P. A.,

"G. Ya. Sedov in the Soviet Far East," Chronicles of the North; Yearbook of Historical Geography, History of Geographical Discoveries and Exploration of the North, v. 2, Moscow, Geografiz, 1957, 279 p. (Akademiya nauk SSSR. Kom-misiya po problemam Severa).

Editorial Board: Andreyev, A. I., Belov, M. I., Burkhanov, V. F., Yefimov, A. V. (Reps. Ed.). Chernenko, M. B. (Deputy Resp. Ed.) and Shcherbakov, D. I.; Ed.: Vorontsova, A. I.; Tech. Ed.: Kosheleva, S. M.; Map. Ed.: Mal'chevskiy, G. N.

PURPOSE: The book is intended for readers interested in the Soviet Arctic.

COVERAGE: The present volume, the second of a series of three, is a collection of 27 articles by various authors presenting an historical account of the exploration and economic development of the Soviet North. A small part of the book is devoted to Arctic areas beyond the confines of the Soviet Union. The aim of the book is to contribute to an understanding of the physical geography, cartography, ethnography, and economy of the Soviet North through a historical survey of these factors. A large number of authors, explorers, scientists, travellers, pilots, navigators, etc., are cited.

CHUMAK, S. A.

Organization of underground haulage in the producing shaft

Moskva, Ugletekhizdat, 1952. 99 p.

(54-18334)

TN336.C5

CHUMAK, S.A.

KEYYS, R. [Goeuillet, R.]; PRISYAZHNIKOV -VAL', V.S.[translator];
~~CHUMAK, S.A.~~, redaktor; ZARITSKIY, S.Ye., redaktor izdatel'stva;
ZAZUL'SKAYA, V.P., tekhnicheskij redaktor

[Cyclic study of percussive drilling. Translated from the
French] Issledovanie tsikla udarnogo bureniya. Perevod s
frantsuzskogo V.S. Prislazhnikova-Val'. Pod red. S.A.
Chumaka. Moskva, Ugletekhizdat, 1956. 85 p. (MLBA 10:4)
(Boring)

CHUMAK, S.A., dotsent

Selecting new types of conveyors for horizontal workings. Ugol'.
prom. no.3:67-71 My-Je '62. (MIRA 18:3)

1. Donetskij politekhnicheskij institut.

CHUMAK, S.A., kand.tekhn.nauk

Selecting locomotives for the airways of Donets Basin mines.
Ugol' Ukr. 6 no.11:29-30 N '62. (MIRA 15:12)

1. Donetskiy politekhnicheskiy institut.
(Donets Basin--Mine Railroads)

CHUMAK, Viktor, tokar'

Multipurpose cutting tool. Znan.ta pratsia no.1:30
Ja '60. (MIRA 13:5)

1. Khar'kovskiy turbinnyy zavod im. S.M.Kirova.
(Metal-cutting tools)

CHUMAK, V.I.

Extinction of orientation reflexes in kittens soon after birth.

Zh. vys. nerv. deiat. 5 no.6:863-872 N-D '55.

(MLRA 9:3)

1. Laboratoriya sravnitel'nogo ontogeneza nervnoy sistemy Instituta fiziologii AN SSSR.

(ORIENTATION,

extinction of orientation sucking reflex stimulated by
olfactory factors in cats early after birth)

(REFLEX,

extinction of orientation sucking reflex stimulated by
olfactory factors in cats early after birth)

CHUMAK, V. I.

Chumak, V. I.

"Conditioned reflexes to the relationship of stimuli in goldfish, pigeons, and rabbits." Moscow State Order of Lenin and Order of Labor Red Banner U imeni M. V. Lomonosov. Soil Biology Faculty. Moscow, 1956. (Dissertation for the degree of Candidate in Biological Sciences)

Knizhnaya letopis'

No. 35, 1956. Moscow

CHUMAK, V. I.

USSR/Human and Animal Physiology. Nervous System. Higher
Nervous Activity.-Behavior.

T-10

Abs Jour: Ref Zhur-Diol., No 12, 1958, 56023.

Author : Chumak, V.I.

* Inst :

Title : The Influence of Stimulants Upon the Conditioned
Reflexes in Goldfishes, Pigeons, and Rabbits.

Orig Pub: Zh. vyssh. nervn. deyat-sti, 1957, 7, No 1, 114-125.

Abstract: Positive conditioned reflexes when accepting food,
which act upon visual stimulation (CRAS) according
to the size of the area, were developed in rabbits,
pigeons, and goldfishes (at a separate presentation
of positive and differentiated objects, i.e., on
the basis of temporary connections with the absolute

Card : 1/4 * KAFEDRA FIZIOLOGII VYSSHEY NERVNOY DEYATEL'NOSTI ^{*} MOSKOVSKOGO
GOUDARSTVENNOGO UNIVERSITETA

USSR/Human and Animal Physiology. Nervous System. Higher
Nervous Activity. Behavior.

T-10

Abs Jour: Ref Zhur-Diol., No 12, 1958, 56023.

indicator of the stimulants). Such development occurred after 3-13 presentations and became strengthened after 8-38 presentations. Differentiation developed faster and was more stable in rabbits and pigeons than in goldfishes. CRAS were noted in those cases where an usual stimulant followed an unusual stimulant (large or small), which occurred after an interval of $1-1\frac{1}{2}$ minutes in fishes, and after an interval of 1-2 minutes in pigeons and rabbits. Larger or smaller intervals produced a reaction development with respect to the absolute stimulative indicants. When a simultaneous presentation of positive and of differentiated objects was executed, positive conditioned reflexes of visual

Card : 2/3

USSR/Human and Animal Physiology. Nervous System. Higher
Nervous Activity. Behavior.

T-10

Abs Jour: Ref Zhur-Biol., No 12, 1958, 56023

stimulation developed after 110-180 presentations and have become strengthened after 200-210 presentation in fishes, in pigeons 40-80 presentations were necessary and strengthening occurred after 60-90 presentations, and in rabbits 40-70 presentations were required and strengthening was achieved after 90-110 presentations. In simultaneous presentations of positive and differentiated stimulants (CRAS were developed in separate presentations), CRAS became apparent and were strengthened immediately or after a few appositions. CRAS were generalized as to the area as well as to the form of the objects, and were retained upon presentation of

Card : 3/4

USSR/Human and Animal Physiology - Nervous System.
Higher Nervous Activity. Behavior.

T 10

Abs Jour : Ref Zhur - Biol., No 7, 1958, 32206

Author : Chumak, V.I.

* Inst : -

Title : On the Problem of the Mechanism of Conditioned Reflexes in Relation to Stimuli.

Orig Pub : Zh. vyssh. nervn. deyat-sti, 1957, 7, No 1, 126-134.

Abstract : In fish, pigeons and rabbits, the food getting conditioned reflexes (CR) are developed first in a single stimulator, and later in relation to two stimulators used simultaneously, of which one was strengthened during an isolated presentation, while the second one was not. Then there occurred an alternation of the signal value of the stimuli. CR were successfully extinguished in both separate stimuli, with persistence of CR in relation to them more easy in rabbits and with difficulty in pigeons. In fish, the differentiation

Card 1/2

* DEPT. OF PHYSIOLOGY OF HIGHER NERV. ACTIVITY, MOSCOW STATE UNIVERSITY, MOSCOW.

~~CHUMAK, V.I.~~

Effect of a break in experiments with conditioned response in the
crucian carp, pigeons, and rabbits. Nauch.dokl.vys.shkoloy; biol.
nauki no.1:93-95 '58 (MIRA 11:8)

1. Predstavlena kafedroy fiziologii vysshey nervnoy deyatel'nosti
Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova.

(CONDITIONED RESPONSE)

(CARP)

(PIGEONS)

(RABBITS)

KRYLOV, O.A., CHUMAK, V.I.

Problems in the physiology and pathology of the human and animal
nervous system during the early stages of development. Zhur.vys.
nerv. deiat. 8 no.5:786-790 S-O '58 (MIRA 12:1)
(NERVOUS SYSTEM)

CHUMAK, V.I.

Conditioned response to the relative strength of stimuli in fishes.
Trudy sov.Ikht.kom. no.8:45-50 ' 58. (MIRA 11:11)

1. Kafedra fiziologii vysshey nervnoy deyatel'nosti Moskovskogo
universiteta imeni M.V. Lomonosova.
(Conditioned response) (Fishes--Habits and behavior)

PARIN, V.V., otv. red.; VOLOKHOV, A.A., zam. otv. red.; NIKITINA,
G.M., red.; PILIPENKO, V.I., red.; ~~CHUMAK, V.I., red.~~
BYKOV, V.D., red.; LYUDKOVSKAYA, N.I., tekhn. red.

[Problems in the physiology and pathology of the central nervous
system of man and animals in ontogenesis] Voprosy fiziologii
tsentral'noi nervnoi sistemy cheloveka i zhivotnykh v ontogene-
ze; sbornik nauchnykh rabot. Moskva, Medgiz, 1961. 223 p.
(MIRA 15:8)

1. Akademiya meditsinskikh nauk SSSR, Moscow.
(NERVOUS SYSTEM)

MARKOSYAN, Akop Artashesovich; CHUMAK, V.I., red.

[Physiology] Fiziologiya. 5. izd., perer. Moskva,
Meditsina, 1965. 409 p. (MIRA 18:4)

YUSIM, F.M. [IUsym, F.M.]; LEYZKROVICH; M.Ya.; CHUMAK, V.S.; BRENER, L.G.,
[Brener, L.H.]

Proposals of the efficiency promoters of the Odessa Shoe Factory No.2.
Leh.prom. no.3:59-61 Je - Ag '62. (MIRA 16:2)
(Odessa--Shoe manufacture--Technological innovations)

L 02969-67 EWT(d)/FSS-2/EWT(1)/EWT(m)/EEC(k)-2 GW/WS-2

ACC NR: AT6032437

SOURCE CODE: UR/3133/66/000/009/0157/0161

AUTHOR: Fialko, Ye. I.; Moyaya, R. I.; Kolomiyets, G. I.; Mel'nik, V. I.; Chumak, Yu. V.

ORG: Kiev State University (Kiyevskiy gosudarstvennyy universitet)

TITLE: Statistical characteristics of radio echoes from sporadic meteors

SOURCE: AN UkrSSR. Mezhdunarodstvennyy geofizicheskiy komitet. Informatsionnyy byulleten', no. 9, 1966. Geofizika i astronomiya, 157-161

TOPIC TAGS: radio echo, meteor trail

ABSTRACT: The results of radar observations conducted on 29 October 1964 during a period in which intensive meteor streams were absent were used to construct statistical characteristics of the distribution of meteor radio echoes with respect to amplitude and duration. The radar system used had the following basic parameters: $\lambda = 8.7$ m; pulse power, 10 kw; pulse period, 10 μ sec; pulse repetition rate, 500 pulse/sec; sensitivity, ~ 5 μ v. The four-element receiving and transmitting Yagi antennas were located at height $h = \lambda/2$ above the ground. The 492 radio echoes selected for constructing the statistical character-

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L 02969-67

ACC NR: AT6032437

2

istics included 56 for unsaturated, 76 for intermediate, and 360 for saturated meteor trails. The integral distribution of meteor radio echoes with respect to amplitude and duration is illustrated in Figs. 1 and 2, respectively. The value of parameter s was determined by several approximate methods for a wide range of masses of meteoric bodies by using radio reflections from the trails. Parameter s had a sporadic

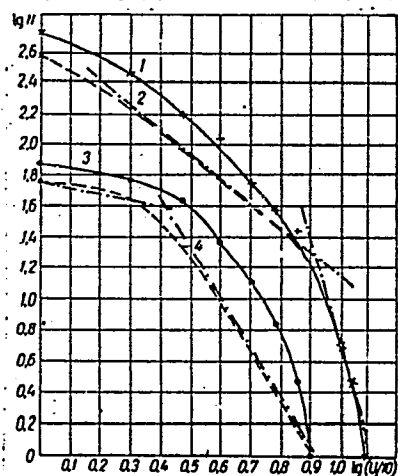


Fig. 1. Integral amplitude distribution of meteor radio echoes

- 1 - General integral amplitude distribution;
- 2 - reflection from saturated trails;
- 3 - reflection from intermediate trails;
- 4 - reflection from unsaturated trails

Card 2/3

L 02969-67

ACC NR: AT6032437

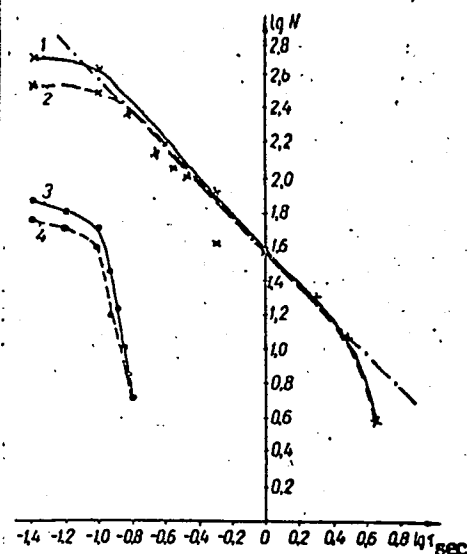


Fig. 2. Integral distribution of the duration of meteor radio echoes

- 1 - General integral distribution;
- 2 - reflection from saturated trails;
- 3 - reflection from intermediate trails;
- 4 - reflection from unsaturated trails.

noise value of 2.0—2.25, which was in agreement with previous determinations. Orig. art. has: 5 figures.

SUB CODE: 03 / SUBM DATE: none/ ORIG REF: 007/ OTH REF: 003
ATD PRESS: 5099

Card 3/3 *LC*

STRELKOV, M.I.; CHUMAK, Z.P.

Electron microscope study of C₃A hydration. Dokl. AN USSR
no.12:1595-1600 '65. (MIRA 19:1)

1. Kharkivs'kyi prombud NDIproyekt.

Sov/68-59-10-8/24
AUTHORS: Semisalov, Ya.D., Chumak, Ye.M., and Romanovskiy, V.A.
TITLE: Some Experience in Operating Coke Ovens Fired with
a Rich Gas
PERIODICAL: Koks i khimiya, 1959, Nr 10, pp30-31 (USSR)
ABSTRACT: Gorlovka coke ovens were designed for firing with a
mixture of coke oven and a rich gas (15-20%). The
nature of the rich gas is not specified. There were
individual periods during which the proportion of rich
gas amounted to 90%, which, however, has no deleterious
effect on the uniformity of temperature distribution
in the ovens, and the temperature of the under roof
space was maintained on a required level (table 1).
Ovens were fired with an excess air coefficient of
1.3-1.5 at a suction in the regenerator on the
ascending stream 3 - 3.2mm H₂O. During 1956-1958 an
increased proportion of gas coal (from 14% to 26%)
was incorporated into the blend. For this reason
the temperature in the heating flues was raised.

Card 1/2

Some Experience in Operating Coke Ovens Fired with a Rich Gas Sov/68-59-10-8/24

The above measures had no noticeable effect on the quality of the coke (table 2). There are 3 tables.

ASSOCIATION: Gorlovskiy koksokhimicheskiy zavod
(Gorlovka Coking Works)

Card 2/2

BALL, A.N.; CHUMAK, Yu.I., agronom

Signal station on the "Biruintsa" Collective Farm. Zashch.rast.
ot vred.i bol. 7 no.5:48-49 My '62. (MIRA 15:11)

1. Starshiy agronom Moldavskiy respublikanskoy stantsii zashchity
rasteniy (for Ball). 2. Kolkhoz "Biruintsa" ("Pobeda") Strashenskogo
rayona, Moldavskaya SSR (for Chumak).
(Moldavia--Plants, Protection of)

L 3295-66 FSS-2/EWT(1)/EWA(d) GS/GW/WR

ACCESSION NR: AT5024189

UR/0000/65/000/000/0057/0064

AUTHOR: Fialko, Ye. I.; Bayrachenko, I. V.; Chumak, Yu. V.; Moysya, R. I.; Mel'nik, V. I. 55 55 55 55 39
BT/1

TITLE: Statistical characteristics of meteor radio echoes during the 1963 Geminid shower

SOURCE: AN UkrSSR. Fizika komet i meteorov (Physics of comets and meteors). Kiev, Izd-vo Naukova dumka, 1965, 57-64

TOPIC TAGS: radio echo, meteor trail, reflected signal, radar echo, radar meteor observation 24,55 12,55

ABSTRACT: Statistical characteristics of meteor radio echoes during the 1963 Geminid shower were studied experimentally. The radar equipment used had the following parameters: $\lambda = 9.59$ and 6.49 m; power, 20 kev; prf, 500 pps; and pulse duration, 10 μ sec. In all, 198—207 meteor radio echoes were used to determine the distribution of radio echoes with respect to duration, amplitude, time interval between echoes, and distance. On the basis of the results obtained, the following conclusions were reached: 1) Distributions of meteor radio echoes with respect to duration at $\lambda = 9.59$ m and $\lambda = 6.49$ m are practically identical

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L-3295-66
ACCESSION NR: AT5024189

in the region of long durations (>1 sec) and differ slightly in the region of short durations. 2) In the distribution of amplitudes, three groups of reflections are distinguished — stable, intermediate, and unstable. The distribution of intermediate radio echoes is similar to that of stable reflections. 3) Distribution of intervals between appearances of meteor reflections has an exponential character. Orig. art. has: 4 figures and 5 formulas. [JR]

ASSOCIATION: none

SUBMITTED: 21May65

ENCL: 00

SUB CODE: AA, EC

NO REF SOV: 003

OTHER: 002

ATD PRESS: 4/13

L 3291-66 EWT(1)/FCC/EWA(d)/EWA(h) GS/GW
 ACCESSION NR: AT5024190

UR/0000/65/000/000/0065/0067

AUTHOR: Fialko, Ye. I.; Bayrachenko, I. V.; Chumak, Yu. V.

TITLE: Some results of the utilization of intermediate-type trails for measuring the electron density of a meteor trail.

SOURCE: AN UkrSSR. Fizika komet i meteorov (Physics of comets and meteors). Kiev, Izd-vo Naukova dumka, 1965, 65-67

TOPIC TAGS: meteor trail, radar meteor observation, radio echo, electron density, mathematic method

ABSTRACT: Linear electron density α of ionized meteor trails was determined from radar observations of intermediate-type trails at $\lambda = 9.59$ m. The observations were conducted by Kiev State University in 1963. The method is based on the dependence of intermediate-type radio echoes on α . The distribution of α was determined within the range of 10^{12} to 5×10^{12} el/cm. Distribution of intermediate-type trails according to α is shown in Fig. 1 of Enclosure, where n is the number of trails in which electron density α exceeded a given value. Orig. art. has: 1 figure and 1 formula. [KM]

ASSOCIATION: none

Card 1/3

L 3291-66

ACCESSION NR: AT5024190

SUBMITTED: 21May65

NO REF SOV: 002

ENCL: 01

OTHER: 001

SUB CODE: A⁰AJEC

ATD PRESS 4113

Card 2/3

L 3291-66

ACCESSION NR: AT5024190

ENCLOSURE: 01

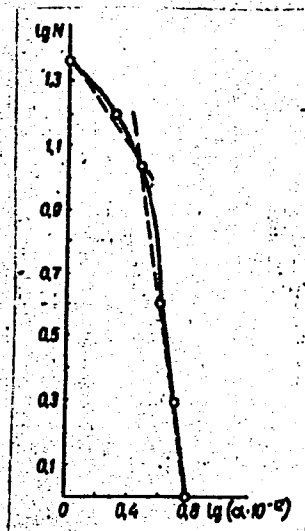


Fig. 1. Distribution of intermediate-type trails according to α

Card 3/3 SP

STRELKOV, M.I., kand.tekhn.nauk; CHUMAK, Z.P., inzh.

Electron microscope studies of the form and internal structure
of Ca(OH)_2 separated out from supersaturated solutions. Stroi.
mat. 8 no.12:36-38 D '62. (MIRA 16:1)
(Lime) (Electron microscope)

STRELKOV, M.I.; CHUMAK, Z.P.

On pseudoforms of hydration of binders observed by the electron microscope. Dop. AN URSR no.8:1076-1080 '63. (MIRA 16:10)

1. Yuzhnyy nauchno-issledovatel'skiy institut promyshlennogo stroitel'stva. Predstavleno akademikom AN UkrSSR P.P. Budnikovym.
(Binding materials) (Hydration)
(Electron microscopy)

LEYZEROVICH, Grigoriy Yakovlevich; BABINA, Irina Vladimirovna;
SEREBRENNIKOVA, Esfir' Yakovlevna; CHUMAK, Z.V., inzh.,
retsensent; POPOV, N.A., inzh., retsensent; TSETLIN, V.M.,
red.; MISHARINA, K.D., red.izd-va; ISLENT'YEVA, P.G.,
tekhn.red.

[Roasting zinc concentrates in a fluidized bed] Obzhi-
tsinkovykh kontsentratorov v kipiashchem sloe. Pod red.
Leizerovicha. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po
cherno i tsvetnoi metallurgii, 1959. 222 p. (MIRA 12:8)
(Zinc--Metallurgy)

LOSKUTOV, Fedor Mikhaylovich, prof.; TSEYDLER, Aleksandr Al'bertovich,
prof.; CHUMAK, Z.V., red.; LUTSKAYA, G.A., red.izd-va;
MIKHAYLOVA, V.V., tekhn. red.

[Calculations on the metallurgy of heavy nonferrous metals]
Raschety po metallurgii tiazhelykh tsvetnykh metallov. 2. izd.,
peresm. i dop. Moskva, Metallurgizdat, 1962. 591 p.
(MIRA 16:1)

(Nonferrous metals--Metallurgy)

CHUMAKIN, M.Ye.

Generalized resolvents of an isometric operator. Dokl. AN
SSSR 154 no.4:791-794 F '64. (MIRA 17:3)

1. Ul'yanovskiy gosudarstvennyy pedagogicheskiy institut
im. Ul'yanova. Predstavleno akademikom P.S. Novikovym.

VAVILOV, L.; IGNAT'YEV, V.; CHUMAKOV, A.; USHAKOV, A.

Useful undertaking. Zashch. rast. ot vred. i bol. 5 no. 8:60
Ag '60. (MIRA 13:12)

(Plant quarantine)

PROCESSING AND PROPERTIES INDEX																									
1ST AND 2ND COLUMNS													3RD AND 4TH COLUMNS												
1ST AND 2ND COLUMNS													3RD AND 4TH COLUMNS												
<p>CA</p> <p>Origin of sodium in spilites. A. A. Chumakov. <i>Bull. acad. sci. U. R. S. S., Ser. geol.</i> 1940, No. 2, 403.—C studied the spilite formation of the Mugodzhar (lower Urals) and concludes that the primary magma of spilites corresponded to the compn. of diabases. The albite of the spilites is of secondary genesis because of frequent occurrence in this mineral of relics of basic plagioclase. The discovery of basic glass in the Middle Paleozoic spilites is further evidence of the secondary character of albite in spilites. Chem. analysis of glasses indicates that the spilite magma contained even less Na than diabase and no primary albite could exist in spilites. B. Z. Kamich</p>																									
<p>ASB-51A METALLURGICAL LITERATURE CLASSIFICATION</p>																									

1ST AND 2ND ORDERS																									
PROCESSES AND PROPERTIES INDEX																									
<p><i>Ca</i></p> <p>The genesis of siderite deposits in the Kois territory of the A. S. S. R. A. A. Chumakov and N. S. Myasnikov. <i>Bull. acad. sci. U. R. S. S., Ser. Min.</i>, 1944, No. 2, 47-49 (in English, 47-48).—The average Fe content of the two siderite deposits investigated is 30%. It is claimed that the formation of these siderites is due to reduction reactions in the presence of free H₂S and CO₂. J. S. J.</p>																									
<p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																									
1ST AND 2ND ORDERS													1ST AND 2ND ORDERS												
1ST AND 2ND ORDERS													1ST AND 2ND ORDERS												

CHUMAKOV, A. A.

USSR/Geology - Ore Deposits
Thorium Ore
Rare Earths

1 May 1947

"A New Lode of 'Stenstrupin' in the Lovozero Tundras,"
A A Chumakov, I V Bel'kov, I D Batiyeva, 4 pp

"Dok Akad Nauk USSR Nov Ser" Vol LVI, No 4

'Stenstrupin' is described as a thoro-titano-silicate
hydrate of rare earths and manganese. It is known
only in southern Greenland and the above area.

1788

CHUMAKOV, A. A.

PA 60¹26

USSR/Geology
Petrology

Jul 1947

"Petrology and Metallogenesis of Alkaline Granites
in the Kola Peninsula," A. A. Chumakov, Kola Base,
Acad Sci USSR, Kirovsk, 2 $\frac{1}{2}$ pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LVII, No 1

Describes petrological research carried out in 1946
by Kola Base of Academy of Sciences, USSR on Kiev
alkaline granites, which established nature of
granites and their role and place in geological
history. Submitted by Academician D. S. Belyankin,
26 Dec 1946.

60T26

USSR/Geology
Rock Formation
Stratification

Nov 1947

"Reasons for the Genesis of Urtite Horizontals in the Laminated Complex of the Luyavrut Alkaline Rocks (Kola Peninsula)," A. A. Chumakov, Kola Base, Academy of Sciences of the USSR, 2 1/2 pp

"Dok Ak Nauk" Vol LVIII, No 5

This is another article which sheds some light on the nature and origin of the stratified structure of the Alkaline rocks of the Lovozero rock intrusions. Describes particularly the genesis of the urtites, which have been found in the laminated complex, and

38741

USSR/Geology (Contd)

Nov 1947

have the appearance of multistaged inclined conforming horizons. Submitted by Academician D. S. Belyan-kin, 2 Jul 1947.

38741

PA 38741

CHUMAKOV, A. A.

CHUMAKOV, A. A.

USSR/Geology

Tectonics

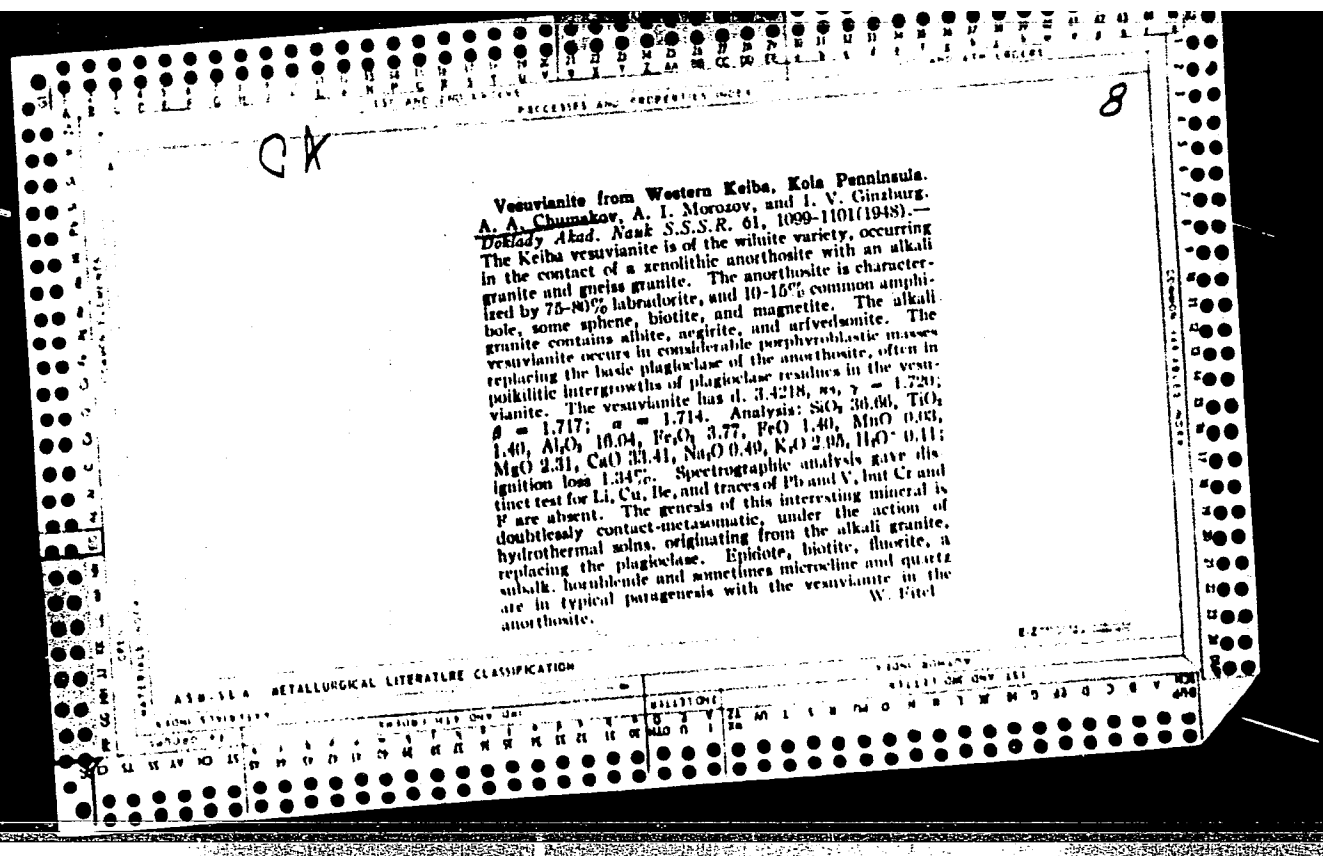
Feb 1948

"Origin of Alkaline Granites in Kola Peninsula," B. M. Kupletskiy, A. A. Chumakov, Kola Sci Res Base Imeni S. M. Kirov, Acad Sci USSR, 3 pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LIX, No 4

Describes research on alkaline granites in the Zapadnyye Kevy region of Kola Peninsula and gives details of their geologic structure and properties. Submitted by Academician D. S. Belyankin, 1 Dec 1947.

PA 43/43127



~~CHUMAKOV, A.A.~~

Origin of the Kosoutsy sandstones in Moldavia. Dokl. AN SSSR 94
no.2:319-322 Ja '54. (MLRA 7:1)

1. Moldavskiy filial Akademii nauk SSSR.
(Moldavia--Sandstone) (Sandstone--Moldavia)

CHUMAKOV, A.A.

Magmatic evolution in the southern parts of the Dnestr-Prut platform. A. A. Chumakov, P. M. Sukharevich, and V. S. Sayanov. ~~Trudy Akad. Nauk S.S.S.R.~~ *Nauk S.S.S.R.* 97, 515-18 (1984).—Dacites, liparite-dacites, and their tuffs, assoc. with diabase-splites have recently been detected, also a gabbro, gabbro-norite, granite-gneiss and migmatite massive, assoc. with arkoses of reef-shelf character. The effusive rocks belong to 3 distinct tectonic cycles: (1) A sub-alk. granite intrusion into Archean super-crustal sediments (schists, amphibolites); these intrusions are especially migmatites and porphyroblastic rocks, highly metamorphic. They are characterized in their mineral compn. by quartz, microcline, Ab-rich plagioclase, and little ferric minerals. (2) Gabbro and gabbro-norites which are much younger than the granites and migmatites of (1). They are assoc. with diabases and splites, tuffs, etc.; they have ophitic and amygdaloid structures, with highly albitized plagioclases. (3) The youngest group of the magmatic cycles in the area between R. Dnestr and R. Prut is the dacitic group with their tuffs, assoc. with dikes of diabase and dacite, of the Klumnerian volcanic period. All of these rocks have undergone dynamic metamorphism. Characteristic are the interstitial and hyalopilitic structures of these rocks with K, or K Na feldspars, more or less albitized. Chloritized hornblende is observed as phenocrysts, with opacitic peripheries. Chem. analyses of 12 rocks of the area are given. W. E.

CHUMAKOV, A. A.

U.S.S.R.

Chemical and mineralogical composition and classification of alkaline granites. A. A. Chumakov. *Doklady Akad. Nauk SSSR*, 98, 457, 1954. The relatively young age of typical alk. granites (post-Variscan or even younger), occurring in East Kazakhstan and Baltakar is striking, while Paleozoic and Archean rocks of this class (e.g. nepheline syenites) are very rare. In Transbaikalia, Arsen'ev (1946) has demonstrated the relation of the alk. granites to Mesozoic orogenic foldings, and similar occurrences in the North area of the U.S.S.R. are observed along the boundaries of old crustal basements with geologically young foldings. The chem. criterion of relatively increased contents in K_2O in alk. granites is not sufficient for a classification of these rocks, the occurrence of Na-Fe^{III} pyroxenes and amphiboles is much more characteristic, as is the relatively high content of Fe^{III} + Mn^{II} and the low content in Ca^{++} . Among the many attempts to calculate characteristic mod. parameters from the analyses of alk. granites, only the $Zavitskiy$ parameter f' and c' may be useful; f' being higher and c' lower than in normal granites. In the triangular projections, however, the clusters for the alk. and the normal granites are almost indistinguishable, not even in the nepheline-kaliophilite-SiO₂ projection of Schairer and Bowen. Therefore, C. defines alk. granites only by mineralogical facts, e.g. the assocn. of albite and aegirite, or of albite-oligoclase and Na-Fe-amphiboles. If $K_2O > Na_2O$, biotite also appears in the assocn. If plagioclase is $>$ K-feldspar, the aegirite is replaced by arfvedsonite and Fe-rich hastingsite. Only a mineralogical classification, and not the calcn. of chem. moduli from bulk analyses is able to give a clear understanding of the genetic relations of alk. granites. W. Eitel

CHUMAKOV, A.A.; SUKHAREVICH, P.M.

Tectonic-magmatic phenomena observed in the southern part of the
Dniester-Prut Watershed Plateau. Dokl.AN SSSR 108 no.3:538-540
My '56. (MLRA 9:8)

1. Kishinevskiy gosudarstvennyy universitet. Predstavleno
akademikom N.S. Shatskim.
(Dniester Valley--Geology, Structural)(Prut Valley--Geology,
Structural)

CHUMAKOV, A. A.

Formation of rapakivilike and alkaline granitoids following
interaction between granophyre magma and diabases. Dokl. AN
SSSR 110 no.6:1073-1076 0 '56. (MLRA 10:2)

1. Kishinevskiy gosudarstvennyy universitet. Predstavleno
akademikom D.S. Korzhinskim.
(Granite) (Diabase)

20-2-46/60

AUTHORS: Chumakov, A. A. , Ginzburg, I. V.

TITLE: A New Rare Metal Geochemical Province on the Kola Peninsula
(Novaya redkometal'naya geokhimicheskaya provintsiya na
Kol'skom poluostrove)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 114, Nr 2, pp.400-403
(USSR)

ABSTRACT: The authors of the paper under review have singled out the Kola Peninsula as a special geochemical province, mainly because of the cesium-lithium deposits found there. Previously the Kola Peninsula had been considered to be a part of the Fennoscandic province; this assumption was based on the research work done by Fersman. The rare elements, in widely scattered deposits, are genetically connected with many pegmatite fields, which are of practical value, particularly lithium pegmatites and the numerous accompanying associations of rare metals. The characteristic feature of the new province is the existence of an alkaline granitic and of a nepheline-syenite mineral complex, furthermore the occurrence

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20-2-46/60

A New Rare Metal Geochemical Province on the Kola Peninsula

of granitoid magmata of the palingenous-metasomatic petrogenesis, and a further development of granitization and alkaline metasomatoses. For a long time it was not possible to discover any very important and characteristic mineral associations or elements, as, for instance, Li, Ce, Rb, Be, Ta and Ni, except where they were combined with Paleozoic subvolcanoes Khibiny and Luyavurt. Fersman's prognosis that accumulations of Li and Ge could be expected only in combination with colder pegmatite geophases, the occurrence of which in crystalline shields was less probable, soon was confirmed by the authors of the present paper. Fersman based himself on analogous cases in Sweden and Canada (Manitoba). Altogether, a whole layer, an uninterrupted pegmatite field was discovered, bearing the name Voronja-Poros-Ozero. As a rule, the pegmatite field is situated within a deeply metamorphosed mass of volcanogenous and sedimentary origin, and in partly amphibolic and albitic gabbro-labradorites. The entire pegmatite mass is dislocated in a complicated way, and steeply shifted in the direction of the centrally axis structure of the Kola Peninsula. A repeated metamorphism, as well as intense contactmetasomatic processes connected with granitoid intrusions and pegmatites, and also phenomena

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20-2-46/60

A New Rare Metal Geochemical Province on the Kola Peninsula

of magnetic replacement, have almost completely destroyed the original structures of the ore-bearing minerals. Investigations of the new lithium deposits on the Kola Peninsula show that, as compared to well known similar deposits in the USSR and abroad, it represents, viewed from the standpoint of the conditions of its geological position and with respect to some mineralogical and geological peculiarities, a type of the complex rare-metal pegmatite field of regional importance. In the Fersman's classification it corresponds to a rare-metal province, particularly of lithium. There are 5 Soviet references.

ASSOCIATION: Kishinev State University imeni S. M. Kirov
(Kishinevskiy gosudarstvenny universitet im. S. M. Kirova)
Kola Branch, AS USSR (Kol'skiy filial Akademii nauk SSSR)

PRESENTED: November 16, 1956, by D. I. Shcherbakov, Member of the Academy
Card 3/4

20-2-46/60

A New Rare Metal Geochemical Province on the Kola Peninsula

SUBMITTED: October 15, 1956

AVAILABLE: Library of Congress

Card 4/4

GRIGORYAN, A.V.; ZHDANOV, B.G.; CHUMAKOV, A.A.; KIPRENSKIY, Yu.V.

Appearance of a sarcoma at the site of a trophic ulcer and
after gunshot wounds. Khirurgiia 36 no.11:122-125 N '60.
(MIRA 13:12)

1. Iz kafedry obshehey khirurgii (sav. - prof. V.I. Strushkov)
I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.
Sechenova i patologoanatomicheskogo otdeleniya (sav. - deyst-
vitel'nyy chlen AMN SSSR prof. I.V. Davydovskiy) bol'nitsy
imeni Medsantrud (glavnyy vrach A.P. Timofeyeva).
(ULCER) (GUNSHOT WOUNDS) (TUMORS)

CHUMAKOV, A. A.; YAGODOVSKIY, V. S. (Moskva)

Hyperparathyroidism in combination with multiple adenomatoses
of the endocrine glands. Arkh. pat. no.8:76-80 '61.
(MIRA 15:4)

1. Iz patologoanatomicheskogo otdeleniya (zav. - deystvitel'nyy
chlen AMN SSSR prof. I. V. Davydovskiy) bol'nitsy No. 28 imeni
Medsantrud (glav. vrach A. P. Timofeyeva)

(PARATHYROID GLANDS---DISEASES)
(ENDOCRINE GLANDS---TUMORS)
(ADENOMA)

CHUMAKOV, A. A.; YUDINA, V. S. (Moskva)

Supplementary peritoneal sac; a developmental defect of the peritoneum. Arkh. pat. no.6:79-81 '62. (MIRA 15:7)

1. Iz kafedry patologicheskoy anatomii (zav. - deystvitel'nyy chlen AMN SSSR prof. I. V. Davydovskiy) II Moskovskogo meditsinskogo instituta imeni N. I. Pirogova (dir. - dotsent M. G. Sirotkina)

(PERITONEUM---ABNORMITIES AND DEFORMITIES)

CHUMAKOV, A.A.

The Pre-Cambrian of Moldavia; recent data on the petrology
of the charnokite series. Dokl. AN SSSR 147 no.1:195-198
N '62. (MIRA 15:11)

1. Kompleksnaya geologo-tematicheskaya partiya Upravleniya
geologii i okhrany neдр pri Sovete Ministrov Moldavskoy
SSR.

(Moldavia--Petrology)

Chumakov, A.A.

70-5-29/31

AUTHORS: Chumakov, A.A., Sil'vestrova, I.M. and Aleksandrov, K.S.

TITLE: The Dielectric, Elastic and Piezo-electric Properties of Single Crystals of Benzophenone (Dielektricheskiye uprugkiye i p'yezoelektricheskiye svoystva monokristallov benzofenona)

PERIODICAL: Kristallografiya, 1957, Vol.2, No.5, pp. 707-709 (USSR).

ABSTRACT: Of the four modifications of crystalline benzophenone ($C_{6H_5}CO$) the one studied was the stable orthorhombic one

belonging to the symmetry group $2:2$. The specimens were made from large crystals ($200-300\text{ cm}^3$) prepared from acetone or carbon tetrachloride solution. The material had a density of 1.219 g/cm^3 at 20°C and a m.p. of 47.0° . Dielectric constant measurements were made at 10^3 and 10^6 c/s and at a field strength of $5-10\text{ V/cm}$.

$\epsilon_{11} = 4.0 \pm 0.05$, $\epsilon_{22} = 4.1 \pm 0.05$, $\epsilon_{33} = 3.7 \pm 0.05$

$\tan \delta = (6 \pm 0.5) \times 10^{-4}$

The dielectric strengths (in kV/mm) were found to be :

$E_x = 28 \div 30 \pm 3$, $E_y = 22 \div 25 \pm 3$, $E_z = 40 \div 50 \pm 4$

The elastic moduli were found to be (in $10^{10}\text{ dynes/cm}^2$)

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70-5-29/31

The Dielectric, Elastic and Piezo-electric Properties of Single Crystals of Benzophenone.

$$c_{11} = 10.70 \pm 0.15$$

$$c_{22} = 10.00 \pm 0.15$$

$$c_{33} = 7.10 \pm 0.04$$

$$c_{44} = 2.03 \pm 0.01$$

$$c_{55} = 1.55 \pm 0.01$$

$$c_{66} = 3.53 \pm 0.03$$

$$c_{23} = 3.21 \pm 0.13$$

$$c_{31} = 1.69 \pm 0.08$$

$$c_{12} = 5.50 \pm 0.20$$

Resonance and anti-resonance frequencies were measured for three slices and the piezo-moduli were calculated from:

$$d_{ik} = \frac{\pi}{2} \frac{1}{f_R l} \left(\frac{\epsilon_{ik} \Delta f}{4\pi \rho f_R} \right)^{1/2}$$

where f_R = resonance frequency, $\Delta f = f_a - f_R$ (f_a = anti-resonance frequency), ϵ_{ik} = dielectric susc., l = length, ρ = density,

Card2/4

The Dielectric, Elastic and Piezo-electric Properties of Single Crystals of Benzophenone. ^{70-5-29/31}

$$d_{14} = 3.7 \pm 0.1 \times 10^{-7} \text{ c.g.s. units}$$

$$d_{25} = 0.6 \pm 0.02$$

$$d_{36} = 6.1 \pm 0.1 .$$

The coefficients of electromechanical coupling K were calculated from:

$$k = \frac{\pi}{2} \left(\frac{\Delta f}{f_R} \right)^{1/2} \quad \text{as } k_{XY} t_{45^\circ} = 7.5\%$$

$$k_{YX} t_{45^\circ} = 3.8\%$$

$$k_{ZX} t_{45^\circ} = 16.0\% .$$

$XYt_{45^\circ} \equiv$ X perpendicular to slice, length at 45° to Y and Z and electrodes on face perp. to X.

Card 3/4

AUTHORS: Sil'vestrova, I.M., Aleksandrov, K.S. and Chumakov, A.A. 70-3-3-32/36

TITLE: The Growth of Crystals of Terpene Monohydrate and Their Elastic and Piezoelectric Properties (Vyrashchivaniye kristallov terpin-monogidrata i ikh uprugiy i p'yezo-elektricheskiye svoystva)

PERIODICAL: Kristallografiya, 1958, Vol 3, Nr 3, pp 386 - 387 (USSR).

ABSTRACT: Crystals of cis-terpene monohydrate $[C_{10}H_{18}(OH)_2 \cdot H_2O]$

have mp. 116 °C and $d_{obs} = 1.11 \text{ g/cm}^3$.

A water thermostat of Heppeler's type was used to grow crystals of 30 - 50 g from a solution in alcohol and acetone cooled 1 - 2 ° below the saturation point. Crystals (morphologically) belong to the class 2.m (rhombohedral). The principal dielectric constants at 1 Mc/s and a field of 5-10 V/cm were found to be $\epsilon_{11} = 2.6 \pm 0.05$, $\epsilon_{22} = 2.8 \pm 0.05$,

$\epsilon_{33} = 3.2 \pm 0.05$. The elastic moduli c_{ik} were measured by an impulsive ultrasonic method as ($\times 10^{10}$ dynes/cm²)

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70-3-3-32/36

The Growth of Crystals of Terpene Monohydrate and Their Elastic and Piezoelectric Properties

$$\begin{array}{lll} c_{11} = 12.5 \pm 0.2, & c_{44} = 2.43 \pm 0.05 & c_{23} = 4.10 \pm 0.2 \\ c_{22} = 9.9 \pm 0.2, & c_{55} = 2.23 \pm 0.04 & c_{31} = 6.20 \pm 0.3 \\ c_{33} = 15.3 \pm 0.2, & c_{66} = 3.46 \pm 0.06 & c_{12} = 3.80 \pm 0.4 \end{array}$$

For the piezoelectric properties the resonant and anti-resonant oscillation frequencies of 6 blocks or plates were measured giving (in cgsu $\times 10^{-8}$) $d_{31} = -6.5 \pm 0.1$
 $d_{32} = 10.6 \pm 0.1$, $d_{33} = 6.6 \pm 0.3$, $d_{15} = 13.0 \pm 0.2$,
 $d_{24} = 17.3 \pm 0.2$.

There are 1 figure and 2 references, 1 Soviet and 1 German.

ASSOCIATION: Institut kristallografii AN SSSR
 (Institute of Crystallography, Ac.Sc.USSR)

SUBMITTED: December 3, 1957
 Card 2/2

SOV/70-3-4-12/26

AUTHORS: Chumakov, A.A., Sil'vestrova, I.M. and Aleksandrov, K.S.

TITLE: Growing Crystals of β -ramnose Monohydrate and the Investigation of their Dielectric, Piezoelectric, and Elastic Properties (Vyrashchivaniye kristallov β -ramnozy monogidrata i issledovaniye ikh dielektricheskikh, p'yezoelektricheskikh i uprugikh svoystv)

PERIODICAL: Kristallografiya, 1958, Vol 3, Nr 4, pp 480-482 (USSR)

ABSTRACT: Crystals of β -ramnose monohydrate, which belong to the dihedral axial class of the monoclinic system, weighing up to 285 g were successfully grown from aqueous solution in the interval 30-60° with 1-3° C super-cooling and with rapid rotation (200-500 rpm) of the crystal. The m.p. is 126° C and the density 1.471 g/cm³. The dielectric constants at 1 Mc/s and 10 V/cm were found by Q-meter to be $e_{11} = 2.6$, $e_{22} = 2.9$, $e_{33} = 3.0$, $e_{13} = 0.15$. The piezoelectric moduli (Class 2) were found to be (in c.g.s.u. $\times 10^{-8}$):

$d_{21} = + 6.0$, $d_{23} = -13.7$, $d_{25} = - 16.1$, $d_{22} = - 8.7$,
 $d_{14} = - 11.8$, $d_{16} = + 4.8$, $d_{34} = - 19.8$, $d_{36} = + 3.8$.

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SOV/70-3-4-12/26

Growing Crystals of β -D-fructofuranose Monohydrate and the Investigation of their Dielectric, Piezoelectric and Elastic Properties

The greatest electromechanical coupling coefficient, 11.7%, occurs for compressional-extensional oscillations along the Z-axis (piezoelectric modulus d_{23}). This material can work as a transmitter of hydrostatic pressure with a piezomodulus of $d_h = -16.4 \times 10^{-8}$ c.g.s.u. The moduli of elasticity were determined by an ultrasonic impulse method and the velocities of u/s waves in six directions - $[100]$, $[010]$, $[001]$, $[110]$, $[101]$, $[011]$ - were measured. The moduli $c_{ik} \cdot 10^{10}$ dynes/cm² at 20 - 22 °C are (tabulated against ik): (11) 3.82; (22) 2.19; (33) 1.98; (44) 0.537; (55) 0.502; (66) 0.911; (23) 0.888; (31) 1.66; (12) 1.60; (15) -0.03; (25) 0.122; (35) -0.118; (46) 0.022.

Resonance and impulse methods agree fairly well.

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SOV/70-3-4-12/26
Growing Crystals of β -D-glucopyranose Monohydrate and the Investigation
of their Dielectric, Piezoelectric and Elastic Properties

There are 2 figures, 1 table and 7 references, 6 of
which are Soviet and 1 German.

ASSOCIATION: Institut kristallografii AN SSSR
(Institute of Crystallography, AS USSR)

SUBMITTED: February 14, 1958

Card 3/3

CHITMAKOV, A. A.

24(2) PLAIN I BOOK EXTRACTOR 507/355

Abstracts must have. Russian Crystallography. Book Crystallography, Vol. 2 (Growth of Crystals, Vol. 2) Moscow, 1959. 298 p. Known ally inserted. 2,000 copies printed.

By: M. I. A. V. Gerasimov, Academician, and N. E. Gerasimov, Doctor of Geological and Mineralogical Sciences; Ed. of Publishing House: L. E. Abramovskiy, Tech. Ed.: V. V. Polubny.

REMARKS: This book is intended for scientists and researchers engaged in crystallography and in growing industrial monocystals.

CONTENTS: This is the second of two volumes on crystal growth. The first volume contained reports delivered at the First Congress on Crystal Growth. The present volume also contains a separate study of normal growth by N. E. Gerasimov (Gerasimov). The studies reflect the development of Soviet research in crystallography in the period following the first congress. The studies are essentially new results obtained by Soviet scientists. The studies express the hope that these studies will with the efforts of Soviet scientists engaged in studying the process of crystal growth and in growing industrial monocystals. No prefaces are mentioned.

Long industrial monocystals. No prefaces are mentioned.

References are given at the end of each article.

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AUTHORS: Chumakov, A.A. and Koptsik, V.A. SOV/70-4-2-16/36
TITLE: Experiments on the Crystallisation of New Piezoelectric Substances (Opyt kristallizatsii novykh p'yezoelektricheskikh veshchestv)
PERIODICAL: Kristallografiya, 1959. Vol 4, Nr 2, pp 235-238 (USSR)
ABSTRACT: Full piezoelectric measurements have been made (by others) on only some 30 substances. The authors of this paper have carried out work on the crystallisation from solution of materials selected from 120 dielectric compounds available commercially. Tests for activity were made on powders. About half the materials tried could be grown as large crystals from suitable solvents. 7 standard solvents were tried for each. Seeds were prepared by lowering the temperature of saturated solutions and were later used in growing big crystals in the dynamic regime (by crystalliser). A table of 49 materials is given with certain physico-chemical data and the recommended solvent. Solubilities are available in standard tables (ex. A. Seidell). Measurements of the coefficients of electromechanical coupling of the following

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SOV/70-4-2-16/36
Experiments on the Crystallisation of New Piezoelectric Substances

materials indicated that full determinations of electrical and mechanical parameters would be worthwhile: sodium salt of β -anthraquinone monosulphonic acid; arabinose; acetoxime; barium nitrite; benzophenone; dimethyl glyoxime; cadmium bromide ($\text{CdBr}_2 \cdot 4\text{H}_2\text{O}$); potassium phthalate; calcium iodate; $\text{LiHCO}_2 \cdot \text{H}_2\text{O}$ lithium formate; acetophenone oxime; ramnose; sulphanilic acid; terpene hydrate; d,l-treonine; urotropine; formaldehyde sodium bisulphite; quinine hydrochloride; amber anhydride ($\text{C}_4\text{H}_4\text{O}_3$).

Acknowledgments are made to A.V. Shubnikov, A.N. Izrailenko and G.I. Kozlova. There are 1 table and 12 references, 11 of which are Soviet and 1 English.

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SOV/70-4-2-16/36
Experiments on the Crystallisation of New Piezoelectric Substances

ASSOCIATION: Institut kristallografii AN SSSR (Institute of
Crystallography of the Ac.Sc.USSR)

SUBMITTED: April 8, 1958

Card 3/3

CHUMAKOV, A. A., CAND MED SCI, ^{*Peculiarities*} "~~CHARACTERISTICS~~ OF BLOOD
CIRCULATION IN THE LOWER EXTREMITIES UNDER CONDITIONS OF
GANGRENE AND IN ~~THE PRESENCE OF~~ ATHEROSCLEROSIS AND "EN-
DARTERITIS OBLITERANS".⁹" MOSCOW, 1960. (ACAD MED SCI USSR).
(KL, 3-61, 236).

CHUMAKOV, A.A.

Features of blood circulation in the lower extremities in
atherosclerosis and "obliterating endarteritis". Arkh. pat.
22 no. 4:63-71 '60. (MIRA 14:1)
(ARTERIES--DISEASES) (ARTERIOSCLEROSIS)
(LEG--BLOOD SUPPLY)

GRIGORYAN, A.V. (Moskva, Smolenskiy bul'var, d.17, kv.43); ZHDANOV, V.S.;
CHUMAKOV, A.A.

Some aspects of the pathogenesis of primary cancer of the lungs.
Grud. khir. 2 no.3:32-36 My-Je '60. (MIRA 15:3)

1. Iz kliniki obshchey khirurgii (zav. - prof. V.I. Struchkov)
lechebnogo fakul'teta I Moskovskogo ordena Lenina meditsinskogo
instituta imeni I.M. Sechenova i patologoanatomicheskogo otdeleniya
(zav. - deystvitel'nyy chlen AMN SSSR prof. I.V. Davydovskiy) na
baze bol'nitsy imeni Medsantrud (glavnyy vrach A.P. Timofeyeva).
(LUNGS--CANCER)

CHUMAKOV, A.A. (Moskva)

"Direct" collateral pathways in the lower extremities in arterio-sclerosis and "obliterating endarteritis." Arkh.pat. no.10:52-58 '61. (MIRA 14:10)

1. Iz patologoanatomicheskogo otdeleniya (zav. - deystvitel'nyy chlen AMN SSSR prof. I.V. Davydovskiy) bol'nitsy No.23 imeni Medsantrud (glavnyy vrach A.N. Lobanova).
(ARTERIES--DISEASES) (EXTREMITIES, LOWER--DISEASES)

GRIGORYAN, A.V. (Moskva, Smolenskiy bul'var, d.17, kv.43); RYZHKOV, Ye.V.;
SAKHAROV, V.A.; ZHDANOV, V.S.; CHUMAKOV, A.A.

Changes in the bronchial stump and pleural cavity following
pneumonectomy and lobectomy. Grud. khir. 1 no.3:62-69 My-Je
'59. (MIRA 15:3)

1. Iz kliniki obshchey khirurgii lechebnogo fakul'teta (zav.
- prof. V.I. Struchkov) I Moskovskogo ordena Lenina meditsinskogo
instituta imeni I.M. Sechenova, patologoanatomicheskogo otdeleniya
(zav. - deystvitel'nyy chlen AMN SSSR prof. I.V. Davydovskiy)
bol'nitsy No.23 imeni Soyuza rabotnikov mediko-sanitarnogo
dela (glavnyy vrach A.P. Timofeyeva).
(LUNGS--SURGERY)

CHUMAKOV, A.A. (Moskva)

Reparative processes in the aorta following the removal of its adventitia. Arkh.pat. 27 no.7:19-25 '65.

(MIRA 18:8)

1. Kafedra patologicheskoy anatomii (zav. - deystvitel'nyy chlen AMN SSSR prof. I.V.Davydovskiy) II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova.

CHUMAKOV, A., kand.sel'skokhoz.nauk

Survey of grain diseases in 1964. Zashch.rast.ct vred.i bol. 10
no.4:48-49 '65. (MIRA 18:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zashchity
rasteniy.

ZAKHAROVA, T.; CHUMAKOV, A.

Review of the diseases of industrial crops. Zashch. rast. ot
vred. i bol. 10 no.5:44-45 '65. (MIRA 18:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zashchity
rasteniy.

CHUMAKOV, A. F., ENGINEER

"Chemical Stability of Certain Varish-Pain Coating and Methods for Testing Them."
Thesis for degree of Cand. Technical Sci. Sub 4 Jul. 49, Moscow Inst. of Chemical
Machine Building.

Summary 82, 18 Dec. 52, Dissertations Presented for Degrees in Science and Engineering
in Moscow in 1949. From Vechernyaya Moskva, Jan-Dec. 1949.

CHUMAKOV, A.F.; MAKARENKOVA, L.A.

Corrosion protection for rotary diffusion apparatus using varnish and paint coatings. Sakh.prom.30 no.5:25-27 My '56. (MIRA 9:9)

1.Nauchno-issledovatel'skiy institut khimicheskikh mashin. 211-1
(Corrosion and anticorrosives)

PETROSYANTS, G.A.; CHUMAKOV, A.I., agronom

Following the September Plenum of the Central Committee of the
CPSU. Zhivotnovodstvo 20 no.9:15-21 S '58. (MIRA 11:10)

1. Predsedatel' kolkhoza imeni Kalinina, Vysokogorskogo rayona,
Tatarskoy SSR (for Petrosyants). 2. Sekretar' partorganizatsii
kolkhoza imeni Kalinina, Vysokogorskogo rayona, Tatarskoy SSR
(for Chumakov).

(Tatar A.S.S.R.--Agriculture)

~~CHUMAKOV, A.N.~~
ZAYTSEVA, N.M.; CHUMAKOV, A.N.

Prevention of complications in scarlet fever. *Pediatrics*, Moskva
no.6:38-40 Nov-Dec 1953. (CML 25:5)

1. Of the Infectious Division of the Department of Children's Diseases
(Head of Department -- Yu. F. Dombrovskaya) of First Moscow Order of
Lenin Medical Institute located at Children's Hospital imeni I. V.
Rusakov (Head Physician -- Docent V. A. Krushkov).

34195

S/139/61/000/006/015/023
EO32/E514

24.6730

AUTHOR: Chumakov, A.S.

TITLE: The motion of electrons inside a bunch in a synchrotron

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, no.6,
1961, 113-117

TEXT: The aim of this work was to derive approximate formulae for the period of phase oscillations and the phase of an electron in a bunch as a function of time. The formulae are derived on the kinematic approximation in which the bunch is looked upon as a system of noninteracting mass points. The analysis starts with the differential equation for the phase of an electron relative to the travelling wave given by M. S. Rabinovich (Ref.4: Trudy FIAN, 10, 38, 1958). It is pointed out that although it is easy to get the first integral of this differential equation, the second integral can only be evaluated numerically. However, if the sine of the phase angle can be expanded into a Taylor series in powers of the departure of the phase from its equilibrium value, and the first five terms in the expansion are retained, then the

Card 1/2

The motion of electrons inside ...

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integral can be reduced to a standard elliptical integral. This is shown to lead to a reduction in the region of stable phases, although the general character of the motion is not affected by this approximation. The approximation is better for smaller values of the equilibrium phase. Thus, the present theory includes nonlinear terms. It is noted that in distinction to the linear theory, the expression for the period of the phase oscillations depends on the electron input phase. The expression derived by the present author for the departure of the phase from the equilibrium value may be used to determine graphically the high-frequency phase distribution of the electrons at any instant of time. Acknowledgments are expressed to A.A.Vorob'yev who directed this work and to A. N. Didenko for discussions. There are 1 figure and 5 Soviet-bloc references.

ASSOCIATION: NII pri Tomskom politekhnicheskome institute imeni S.M.Kirova (Scientific Research Institute at the Tomsk Polytechnic Institute imeni S.M. Kirov)

SUBMITTED: October 27, 1960

Card 2/2

X

ACCESSION NR: AR4022440

S/0058/64/000/001/A037/A037

SOURCE: RZh. Fizika, Abs. 1A340

AUTHORS: Didenko, A. N.; Chumakov, A. S.

TITLE: Electron radial and phase oscillations in a synchrotron

CITED SOURCE: Izv. Tomskogo politekhn. in-ta, v. 122, 1962, 61-65

TOPIC TAGS: synchrotron, electron oscillation in synchrotron, electron orbit, electron accelerator, electron phase, electron radius, azimuth dependence, electron radial oscillation, electron phase oscillation

TRANSLATION: An approximate analytic solution is obtained for the equation of radial and phase oscillations in a cyclic accelerator. The dependence of the radius of the instantaneous orbit and of the phase of the particle on the azimuth is expressed in terms of

Weierstrass functions. A. Labedev.

Card 1/2

ACCESSION NR: AR4022441

S/0058/64/000/001/A037/A037

SOURCE: RZh. Fizika, Abs. 1A341

AUTHOR: Chumakov, A. S.

TITLE: Concerning bunching of electrons in a synchrotron

CITED SOURCE: Izv. Tomskogo politekhn. in-ta, v. 122, 1962, 66-69

TOPIC TAGS: synchrotron, electron bunching, electron phase oscillation, azimuth distribution, circulating beam, accelerator injection, pulsed injection, electron accelerator

TRANSLATION: The dependence of the electron phase on the input phase at different instants of time is plotted by obtaining the analytic solution of the equation of the phase oscillations in a synchrotron. This makes it possible to investigate the azimuth distribution (bunching) of a circulating beam at the start of the ac-

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ACCESSION NR: AR4022441

celeration. A corresponding plot is presented for the case when the electrons are injected into the synchrotron in a single rectangular pulse with a duration determined by the width of the capture region. A. Lebedev.

DATE ACQ: 03Mar64

SUB CODE: PH, SD

ENCL: 00

Card

2/2

CHUMAKOV, A.V.

Agricultural Machinery - Exhibitions.

Made in the land of socialism. Mol. kolkh. 19 no.4, 1952.

Monthly List of Russian Accessions, Library of Congress, August, 1952. UNCLASSIFIED.

STEPANOV, K. M.; CHUMAKOV, A. Ye.; KORSHUNOVA, A. F.; KOZYREVA, G. A.

Development of field crop diseases in 1959. Zashch. rast.
ot vred. i bol. 5 no.6:41-44 Je '60. (MIRA 16:1)

(Field crops--Diseases and pests)

CHUMAKOV, A.Ye., kand.sel'skokhozyaystvennykh nauk

Role of biotic factors in limiting the infection of soil by
Helminthosporium sativum P.K. et B. as the causative agent of
root rot of wheat. Trudy VIZR no.1:43-46 '48. (MIRA 11:7)
(Wheat--Diseases and pests) (Root rot) (Helminthosporium sativum)

CHUMAKOV, A. Ye.

CHUMAKOV, A. E. "Biological Method of Disinfecting Soil from the Agent of Wheat Rot, *Helminthosporium sativum*, P.K. et V." Trudy Vsesoiuznogo Instituta Zashchity Rastenii, no. 3, 1951, pp. 58-68. 421 P942

SO: SIRA - SI - 90-53, 15 Dec. 1953

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SHAPIRO, Isaak Davidovich; CHUMAKOV, Arkadiy Yevgrafovich; AKHREMOVICH, M.B.,
red.; CHUNAYEVA, Z.V., tekhn.red.

[Protecting forage plants from pests and diseases] Zashchita
kormovykh kol'tu ot vreditel'ei i boleznei. Moskva, Gos.izd-vo
sel'khoz.lit-ry, 1957. 278 p. (MIRA 10:12)
(Forage plants--Diseases and pests)

CHUMAKOV, A.Ye., kand.sel'skokhozyaystvennykh nauk

How effective are silicate bacteria? Zashch.rast.ot vred. i bol.
3 no.2:42-43 Mr-Ap '58. (MIRA 11:4)
(Bacteria,Silicate)

CHUMAKOV, A.Ye., kand.sel'skokhoz.nauk

Development of field crop diseases in 1960 and a forecast for
1961. Zashch. rast. ot vred. i bol. 6 no.4:48-50 Ap '61. (MIRA 15:6)
(Field crops--Diseases and pests)

KHOKHRYAKOV, M.K.; CHUMAKOV, A.Ye.

Protection of pulse crops against main diseases. Zashch.
rast. ot vred. 1 bol. 7 no.2:28-31 F '62. (MIRA 15:12)

1. Vsesoyuznyy institut zashchity rasteniy.
(Legumes—Diseases and pests)

CHUMAKOV, A.Ye., kand.sel'skokhoyaystvennykh nauk

Predicting the spread of main diseases of field crops in 1962.
Zashch. rast. ot vred. i bol. 7 no.3:47-49 Mr '62. (MIRA 15:11)
(Field crops--Diseases and pests)

POLYAKOV, I.Ya., doktor sel'skokhoz. nauk; CHUMAKOV, A.Ye., kand.
sel'skokhoz. nauk

Forecast for grain and pulse crop pests and diseases. Zashch.
rast. ot vred. i bol. 8 no.3:40-44 Mr '63. (MIRA 17:1)

CHUMAKOV, A. Ye.

"Cereal rusts in the USSR and the prognosis of disease development."

report submitted for 10th Intl Botanical Cong, Edinburgh, Scotland, 3-12 Aug 64.

Inst of Plant Protection, Leningrad.